

BOARD OF HIGHER EDUCATION
REQUEST FOR COMMITTEE AND BOARD ACTION

COMMITTEE: Fiscal Affairs and Administrative Policy **NO.:** FAAP 17-22

COMMITTEE DATE: January 17, 2017

BOARD DATE: January 24, 2017

**NAMING OF WESTFIELD STATE UNIVERSITY'S NEW SCIENCE BUILDING
IN HONOR OF NETTIE MARIA STEVENS**

MOVED: The Board of Higher Education hereby approves the request of the Westfield State University (WSU) Board of Trustees to name the college's new science building the "Dr. Nettie Stevens Hall" in honor of renowned scientist and WSU graduate Nettie Maria Stevens.

Authority: Section 9(m) of Chapter 15A of the Massachusetts General Laws

Contact: Sean P. Nelson, Deputy Commissioner for Administration & Finance

Background

Please see the attached documentation from the Westfield State University College Board of Trustees.



Board of Trustees

December 15, 2016

MOTION

To name the newly constructed science center as *Dr. Nettie Stevens Hall* in recognition of Westfield State University alumna Nettie Stevens' extraordinary accomplishments in the field of genetics.

A handwritten signature in blue ink, appearing to read "Stm", written over a horizontal line.

Steven P. Marcus, Chair

15 DEC 2016

Date

BOARD OF TRUSTEES

January 9, 2017

Dr. Carlos Santiago, Commissioner
Massachusetts Department of Higher Education
One Ashburton Place
14th Floor, Room 1401
Boston, MA 02108-1696

Re: Naming of Science & Innovation Center at Westfield State University

Dear Commissioner Santiago:

It is with great pleasure that I inform you that on December 15, 2016 the Westfield State University Board of Trustees unanimously voted to recommend the naming of our newest structure on campus after Dr. Nettie Maria Stevens, an esteemed alumna of Westfield State and a pioneer in the sciences.

In the late 1880's, Dr. Stevens attended Westfield Normal School (now Westfield State University) to complete the four-year teaching course in only two years. While here, she studied all of the sciences and scored exceptionally high grades. Following several years teaching and even more years studying the sciences, she obtained a master's degree in Physiology from Stanford University and a doctorate degree in Cytology from Bryn Mawr College.

Through her studies, she was closely involved in research clarifying the chromosome's role in heredity. In the early 1900's, her post-doctoral research ultimately gave way to the discovery that the sex of an offspring is determined by the chromosomes it inherits from its parents and the identification of the X and Y chromosomes.

We take great pride in the level of research and learning that is made possible by Westfield State's Science & Innovation Center. We suggest the new building bear her name given Dr. Stevens' link to Westfield State University and her trailblazing scientific discoveries of the early 20th century. This idea was first generated internally by members of our faculty as there is an existing sense of pride surrounding Dr. Stevens. We feel naming the building accordingly will further build this pride and generate interest externally.

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Commissioner Santiago
January 9, 2017
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Nothing elevates the profile of an institution more than the legacy of its graduates, especially when the graduate is one of the very few female scientists at the turn of the 20th century, let alone one involved in such a groundbreaking discovery. There is no doubt that the science building bearing Dr. Stevens' name at Westfield State University is the ultimate tribute to one of its most esteemed alumni, but a recognition of the many women who have been overlooked over the years in the STEM fields, despite their incredible scientific contributions.

Given the Board of Higher Education's proposal to change criteria for naming to include a substantial fundraising component, it is important to note our progress on that front relative to the new building. To date, we've raised more than \$802,376 in gifts and pledges.

We sincerely hope that both the Fiscal Affairs and Administrative Policy Committee and the Board of Higher Education approve the recommendation of the Westfield State University Board of Trustees in naming our Science and Innovation Center the "Dr. Nettie Maria Stevens Hall." At the meetings with the BHE in the next two weeks, we look forward to sharing our plan of continued fundraising efforts in Dr. Stevens' honor.

Provided you approve our recommendation, we look forward to recognizing the significant contributions of our esteemed alumna Dr. Nettie Maria Stevens at the building's official ribbon cutting and naming ceremony slated for May 5, 2017.

Sincerely,

A handwritten signature in black ink, appearing to read "Stum". The signature is written in a cursive, somewhat stylized font.

Steven P. Marcus, Chair

Nettie Maria Stevens (1861-1912)

Nettie Maria Stevens was born on July 7, 1861 in Cavendish, Vermont, USA. She attended public elementary schools in Westford, where her remarkable academic ability was noticed by her teachers. She attended Westford Academy, a private school, and graduated in 1880, aged 18. Westford Academy taught its students a rather traditional classical curriculum emphasizing Latin, Greek, English, and mathematics.

After graduating, Nettie Stevens got work in New Hampshire teaching at Lebanon High School for a year. She enjoyed the work enough to enroll at the teachers' college in Westfield, Massachusetts (then called the Westfield Normal School). It took her only two years to complete the college's four year course. She studied all of the sciences, scoring exceptionally high grades.

In 1883, aged 22, Stevens returned to the family home and began teaching at Minot's Corner School in Westford. She was quickly recognized as a highly talented teacher, working as both a teacher and a supervisor. In 1884 she returned to Westford Academy, the private school she had attended between the ages of 11 and 18, and taught there for six years, until 1892.

In September 1896, aged 35, Stevens moved to California. She had been accepted by Stanford University to study for a bachelor's degree, majoring in physiology. She got her degree in 1899.

She spent her summers in California working at Stanford's Hopkins Seaside Laboratory, where she specialized in studying the microscopic anatomy of organisms (histology) and cells (cytology). The work fascinated her and she stayed on at Stanford, writing a thesis entitled Studies on Ciliate Infusoria, which earned her a master's degree in 1900. While she was working for her master's degree, Stevens discovered two new species of single-celled organisms and she also documented their life cycles.

At the age of 39, early in 1901, Stevens moved to Bryn Mawr College in Pennsylvania and began working for a doctorate in cytology. The head of biology was Thomas Hunt Morgan, who would later win a Nobel Prize for his work clarifying the chromosome's role in heredity.

In 1901 Stevens was awarded a President's European Fellowship, and spent the 1901-1902 academic year carrying out research at the Naples Zoological Station in Italy and the University of Würzburg in Germany. In Würzburg she worked with Theodor Boveri, who, like Thomas Hunt Morgan, was working on the role of the chromosome in heredity.

In 1903, aged 42, Stevens submitted her thesis, which expanded upon the theme of her master's degree. She got her Ph.D. and accepted an offer to carry on at Bryn Mawr with postdoctoral research work.

In 1866 Gregor Mendel had established the rules of heredity – the rules governing how parental traits pass to offspring. Nobody noticed the huge significance of his work until it was rediscovered in about 1900.

Furthermore, nobody knew how the sex of an offspring was determined. There were different theories, including a theory that chromosomes determined sex. Most scientists, however, believed sex was decided by external factors, such as temperature and nutrition, acting on a fertilized egg. They did not believe that sex was decided by chromosomes at the instant of fertilization.

In 1903 Stevens applied for funding from the Carnegie Institute of Washington. She received a \$1,000 grant for the 1904-1905 year to investigate problems relating to sex determination. She won a further \$1,000 in 1905 – the Ellen Richards Prize for the best scientific paper written by a woman – for A Study of the Germ Cells of *Aphis rosae* and *Aphis oenotherae*. Stevens actually wrote this paper in December 1904, at which time she was still uncertain about the source of sex determination.

In 1905 Stevens published a series of papers in which she demonstrated that the sex of an offspring is determined by the chromosomes it inherits from its parents.

One paper read: “Since the male somatic cells have 19 large and 1 small chromosome, while the female somatic cells have 20 large ones, it seems certain that an egg fertilized by a spermatozoon which contains the small chromosome must produce a male, while one fertilized by a spermatozoon containing 10 chromosomes of equal size must produce a female.” -Nettie Stevens “Studies in Spermatogenesis Part I,” 1905

Nettie Stevens identified a large chromosome and a small chromosome – we now call these X and Y. An individual that inherits XX will be female and XY will be male. In her papers, Stevens showed that an organism’s sex is determined by specific chromosomes — today we would say that males have XY and females XX sex chromosomes. In doing so she also provided the first evidence that a physical characteristic – in this case the sex of an individual – is linked to differences in chromosomes.

The discovery was also the first time that a link was demonstrated between a physical characteristic (sex) and differences in chromosomes. Edmund Beecher Wilson of Columbia University, America’s first cell biologist, independently made the same discovery as Stevens, also in 1905.

In 1905 Stevens became an associate in experimental morphology at Bryn Mawr College. In 1912 a research professorship was created for her, but she died before she could begin working in her new role.

Nettie Maria Stevens died aged 50 of breast cancer on May 4, 1912 in Baltimore, Maryland. She never married and had no children. Nettie Stevens was laid to rest in the cemetery at Westfield, Massachusetts beside the graves of her father and step-mother. Her sister Emma’s ashes were also placed there in 1945. (Source: <http://www.famousscintists.org/nettie-stevens/>)

**Board of Higher Education Policy Regarding Building Naming Rights at Massachusetts
Public Higher Education Institutions
December 9, 2014**

Background

The Department of Higher Education recognizes the importance of naming opportunities on college campuses for the purposes of both promoting fundraising and to also recognize individuals who have made a significant professional contribution to the campus and/or the surrounding community.

The Board of Higher Education (BHE) is authorized by Massachusetts General Law (MGL), Chapter 15A, and Section 9(m) to “have overall responsibility for the property, real and personal, occupied or owned by the council, state universities, and community colleges.” Further, pursuant to MGL Chapter 15A, Section 7A, the BHE, in consultation with the presidents of the state universities and the community colleges, shall “maximize fundraising from private sources.”

Currently, the BHE does not have a policy that outlines the approval process, establishes donation thresholds, sets parameters for recognition naming, or provides a mechanism for rescinding a naming right. As a result, the BHE has granted approval for building naming on a case by case basis. This policy is intended to clarify and codify all three of those elements.

I. Scope

In reviewing policies at both the local and national level, naming opportunities are generally classified into four general areas:

1. **Major New Building**
2. **Unnamed existing buildings and buildings that are renovated and repurposed** for use regarded as essential to the campus’s objectives and academic interests.
3. **Classroom and Common Spaces**, including but not limited to: athletic fields, conference rooms, lecture halls, student unions, libraries, dining commons, etc.
4. **Academic Support**, including, but not limited to: schools (e.g. business, education, nursing, music); department chairs, academic programs, endowments, and scholarships.

For the purposes of the BHE, this policy shall pertain to the naming of all new buildings and unnamed existing buildings and buildings that are renovated and repurposed, irrespective of the source of financing for construction or renovation of the building. Naming rights, including donor thresholds, for Classrooms/Common Spaces and Academic Support will continue to be approved at the campus level. The BHE will, however, provide local and national benchmarking to the campuses as guidance for the development of campus policies.

II. Donor Thresholds for Major New Buildings

The BHE will consider approving a naming right for a new building at the following donor thresholds:

New Building on a Community College Campus: \$2,000,000

New Building on a State University Campus: \$2,000,000

III. Donor Thresholds for Renovated or Repurposed Buildings

The BHE will consider approving a naming for a renovated or repurposed Building at the following donor thresholds:

Renovated or Repurposed Building on a Community College Campus: \$1,500,000

Renovated or Repurposed Building on a State University Campus: \$1,500,000

IV. Donor Thresholds for Unnamed Existing Buildings

The BHE will consider approving a naming right for an unnamed existing building at the following donor thresholds:

Unnamed Existing Building on a Community College Campus: \$1,000,000

Unnamed Existing Building on a State University Campus: \$1,000,000

The BHE recognizes that campuses in both segments vary significantly in physical size, academic scope, geography, and regional economics, and therefore a donation below these thresholds would still be considered a significant contribution to the institution. The BHE will consider extending naming rights for donors making a contribution below these thresholds provided that a justification statement is submitted to the BHE along with the campus approved recommendation. Campuses are required to engage the BHE in the vetting of this proposal prior to accepting donations below the above the thresholds or initiating a vote at the campus level.

The Foundation of the respective campus is to be in receipt of the full amount of the donation before a naming right is granted. Exceptions will be considered for future pledges provided that the present value of the pledged amount meets the standard established herein, and a signed agreement reflecting a timeline for receipt is established by the Foundation, the donor, and the campus president.

V. Naming in Recognition

A building may be named in honor of an individual, organization, or group having made a distinguished contribution of service, research, teaching or support to the campus; in honor of an individual, organization, or group having made a distinguished contribution of service or support to the community, the Commonwealth, or the nation.

Naming a building in honor of an individual shall be consistent with the values and mission of public higher education and shall not give the appearance of a conflict of interest, unsubstantiated recognition, or privilege. It is incumbent upon the nominating campus to conduct a background check sufficient enough in scope to ensure the named individual meets this criteria, however, the Board of Higher Education will provide guidance if needed.

Naming a building in honor of an active public official, including a member of the General Court, Executive Branch, Campus Board of Trustees or Campus President, cannot be made per Massachusetts General Law Chapter 268(A) section 23(b) (2), which prohibits the gifts of substantial value given because of a specific position. This provision does not apply to former state employees.

The Ethics Commission has issued to exceptions to the “significant value threshold” as it pertains to public official. 930 CMR 5.08(a) allows for gifts of substantial value for public employees in recognition of “occasions of professional significance....such as hiring, promotions, and noteworthy accomplishments” and “occasions that terminate a professional relationship, such as retirement, transfer, or resignation”. 930 CMR 5.08(6) allows for “gifts of meritorious public service” or “lifetime achievement” provided that the award is based on work done “in whole or in part” as a public employee, that the award is “part of a program that makes such awards on a regular basis pursuant to established standards developed by the awarding entity.”

VI. Authority to Rescind Naming Rights

The removal of a naming right previously approved by the BHE can be initiated by the BHE, the campus boards of trustees, or the donor. The BHE may vote to rescind a naming right under the following conditions:

- 1) An individual, group, or organization is determined to have acted in a manner that is in violation of Federal and State law, including, but not limited to, the state’s code of ethics, or has acted in a manner that is inconsistent with the institution’s values and mission.
- 2) An individual, group, or organization, fails to comply with payment agreements set forth between the individual, group, or organization and the relevant campus and/or Foundation.
- 3) A donor petitions the BHE for the removal of a naming right provided that the donation has been paid-in-full, is non-refundable, and that the petitioner is the legal custodian of the name in question.

Naming rights approved by the campuses that fall outside of the BHE purview shall be subject to removal by vote of the respective campus board of trustees.

VII. Approval Process

Nominations for all naming opportunities will originate at the campus level and must be approved by both the campus president and the local boards of trustees. The campus-approved proposal shall then be submitted to the BHE's Fiscal Affairs and Administrative Policy (FAAP) Committee for recommendation with final approval by the BHE. The timeline for approval is not to exceed 120 days from the date of submission. The Commissioner of Higher Education may approve a campus proposal if received while under the summer delegation of authority. In exigent circumstances, the Commissioner may also act on requests received in between two regularly scheduled meetings; however, such approvals shall be subject to BHE ratification at the BHE's next regularly scheduled meeting.